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Group-Washington

EX PARTE OR LATE FILED

June 6, 1996

EX PARTE

William F. Caton
Acting Secretary
Federal Communications Commission
Mail Stop 1170
1919 M Street, N.W., Room 222
Washington, D.C. 20554

Dear Mr. Caton:

Re: CC Docket No. 95-116, Number Portability

Please associate the attached material with the above-referenced docket.

We are submitting two copies of this notice in accordance with Section 1.1206(a)(1) of the Commission's Rules.

Please stamp and return the provided copy to confirm your receipt. Please contact me should you have any questions or require additional information concerning this matter.

Sincerely,

[signature]

cc: Mindy Littell

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To: A. F. Ciamporcero
From: J. M. Abercrombie
Date: June 4, 1996
Subject: Response to Mindy Littel, Common Carrier Bureau

Pursuant to the request from Mindy Littel of the Common Carrier Bureau, I have attached a the cost comparison of Query on Release to AT&T's LRN proposal for local number portability (LNP). This information was filed on June 3, 1996 before the California Public Utilities Commission in compliance with an Administrative Law Judges Ruling dated May 30, 1996 in R.95-04-043 and I.95-04-044. The cost comparison demonstrated that for Pacific Bell, **QoR is significantly less expensive than AT&T's LRN by between $45 million to $71 million**, dependent upon the percentage of ported numbers.

We have estimated that LRN will cost approximately $529 million in Capital and Expense, with an additional Expense of between $198 million and $344 million to recognize the Churn costs caused by Number Portability. Therefore the identified cost of LRN is between $727 million and $ 873 million, assuming between 20% to 40% ported numbers. Further, **costs associated with the start-up and ongoing administration of the Regional SMS are not yet developed, and are expected to be substantial.** And the real time impacts on switches is still under investigation. As further analysis is completed, additional costs are anticipated to be identified.

The costs for QoR are estimated at between $458 million and $484 million for the Capital and Expense associated with its development and implementation. Further, the costs of Churn, identified above would be common to QoR, as it is for LRN. Therefore the total cost of QoR, identified to date, exclusive of the Regional SMS or real time switch impact is estimated to be between $656 million and $828 million, assuming between 20% to 40% ported numbers.

A significant portion of the expense (over half) associated with the development and implementation of LNP is associated with modifications, replacement and development of Operational Support Systems to directly support any form of LNP, whether it be QoR or LRN. Pacific has identified over 33 initial systems that will be significantly impacted by LNP. I have attached a list and description of those systems impacted. It is worth noting that LNP will cause critical systems, such as COSMOS and PREMIS to need to be replaced, due to current capacity limitations.

New entrants to the local exchange market have been purposely trying to downplay the high costs of LNP and the impact to operational systems. As demonstrated in the Cost Comparison, the costs for LNP are significant and the costs of QoR are less than LRN. Further, the impact to operational support systems can not be ignored. The development and implementation of LNP is not cheap, nor can it be accomplished quickly or easily.

Should you have any other questions, I am available on (510) 823-1174.

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Cost Comparison & Implementation Timeline

QoR vs. LRN

California Local Number Portability Task Force

May 31, 1996

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Cost Comparison

Query on Release is significantly less expensive than LRN

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- 20% Porting
  - $71 Million less than LRN
- 30% Porting
  - $58 Million less than LRN
- 40 % Porting
  - $45 Million less than LRN

Preliminary costs have been identified for QoR and LRN, but they are <u>not</u> all-inclusive

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Costs Included

- Capital
- Expense
  - Repair
  - Maintenance
  - Administrative
  - Systems Development
  - Billing
  - LIDB
  - Misc. STP Expense
  - VAS System
- Churn

Costs Excluded

- Regional SMS
  - Start-up/Ongoing
- Real time impacts on switches still under investigation
- Additional costs continue to be identified

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Capital and associated Expense are the key drivers of cost differences between QoR and LRN

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Costs that **vary** by architecture	Costs **common** to QoR and LRN
• Capital	• Expense
• Expense	— Systems Development
— Repair	— Billing
— Maintenance	— LIDB
— Administrative	— VAS System
— Misc. STP Expense	• Churn
• Real time impacts on the switches still must be identified	

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Cost Comparison

QoR is *$71 Million Less* Than LRN over 5 yrs with 20% ported numbers

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LRN		QoR	
Capital	$314 Million	Capital	$259 Million
Expense	$215 Million	Expense	$199 Million
Subtotal	**$529 Million**	Subtotal	$458 Million
Churn (Net)	$198 Million	Churn (Net)	$198 Million
Total	**$727 Million**	**Total**	**$656 Million**

* Ongoing administration and transactional costs of SMS and SMS Queries not included. Real time impacts on switches not yet available. Additional costs continue to be identified.

Cost Comparison

QoR is *$58 Million Less* Than LRN over 5 yrs with 30% ported numbers

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LRN		QoR	
Capital	$314 Million	Capital	$269 Million
Expense	$215 Million	Expense	$202 Million
Subtotal	**$529 Million**	Subtotal	$471 Million
Churn (Net)	$322 Million	Churn (Net)	$322 Million
Total	**$851 Million**	**Total**	**$793 Million**

* Ongoing administration and transactional costs of SMS and SMS Queries not included. Real time impacts on switches not yet available. Additional costs continue to be identified.

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Cost Comparison

QoR is *$ 45 Million Less* Than LRN over 5 yrs with 40% ported numbers

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($000)	LRN		($000)	QoR
Capital	$314 Million		Capital	$279 Million
Expense	$215 Million		Expense	$205 Million
Subtotal	**$529 Million**		Subtotal	$484 Million
Churn (Net)	$ 344 Million		Churn (Net)	$344 Million
Total	**$ 873 Million**		**Total**	**$828 Million**

* Ongoing administration and transactional costs of SMS and SMS Queries not included. Real time impacts on switches not yet available. Additional costs continue to be identified.

Cost recovery for LNP should be determined prior to ordering implementation timeline

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- While switch software may become available in mid to late 1997, development and implementation of modifications, replacement and/or new operational support systems are required prior to the implementation of LNP

  - Operational Support Systems will not be available until 4th Quarter 1998

    » Assumes critical systems are available for ETE testing

    » Based upon today's understanding of LNP processes

    » Requirements must be developed

  - Pacific Bell will <u>not</u> employ manual, or "blue line" work arounds

    » <u>Mechanized</u> processes will be required

- Pacific will attempt to further expedite the timeline for OSSs, if possible, to facilitate implementation of overlays in the 415 and 916 NPAs, in 2Q98 and 4Q98, respectively

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Significant modifications, replacement and development is required to Operational Support Systems to directly support any form of LNP ... QoR or LRN

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- **Bellcore Systems Impacts**
  - CCRS
  - CCSN
  - COSMOS - *Replacement*
  - Exchange Plus
  - DEPS
  - LIDB
  - LFACS
  - MARCH (TM)
  - NMA-F
  - NSDB
  - PREMIS - *Replacement*
  - SOAC
  - TIRKS
    WFA
- **Pacific Bell New Systems**
  - NAA
  - AP

- **Pacific Bell System Impacts**
  - AMOS
  - APTOS
  - CESAR
  - CLC
  - CSFT
  - CSTAR
  - FIRST
  - FWS
  - ORGIS
  - PBITS
  - PBVS
  - SORD
- **Other Vendor Systems**
  - LMOS
  - IPMS
  - MLT
  - Predictor
  - Starwriter

This list is not all inclusive. Billing Systems impacts are not included. Service Order interface to Regional SMS and local SMS development must be considered

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LNP Systems Impacts

Ordering, Provisioning, and Service Assurance

Bellcore Systems Impact:
>CCRS - Centrex Customer Rearrangement System
>CCSN - Customer Contact Services Node
>COSMOS (capacity limited, replacement) - Computer System for Mainframe Operations
>EXCHANGE PLUS
>FEPS - Facility & Equipment Planning System
>LIDB - Line Identification Data Base
>LOMS - LAC (Loop Assignment Center) Operations Management System
>LFACS - Loop Facilities Assignment & Control System
>MARCH(TM) - Memory Activate/Assignment Recent Change Host
>NMA-F: Network Monitoring and Analysis Facilities
>NSDB - Network Services Data Base
>PREMIS (replacement) - Premises Information System
>SOAC - Service Order Analysis & Control
>TIRKS - Trunk Information Record Keeping System
>WFA - Work Force Administration

Pacific Bell Systems Impact:
>AMOS - Access Mechanized Order System
>APTOS - Automated Pricing, Terminals Options and Services
>CESAR - Customer Enhanced System for Access Requests
>CLC (entry system, TBD)
>CSFT - Customer Services Feature Translator
>CSTAR - CSC Smart Tools Auto Resolver
>FIRST - FACS Internal Resolution System Technology
>FWS - Frame Work Station
>ORGIS - Order Repository Generation and Implementation System
>PBITS - Pacific Bell ISDN Testing System
>PBVS - Pacific Bell Verification System
>SORD (edits for NXX) - Service Order Retrieval & Distribution

Pacific Bell New Systems Impact:
>NAA - Number Assignment and Administration
>AP - Application Platform

Other Vendor Systems:
>LMOS (Lucent) - Loop Maintenance Operating System
>IPMS - Integrated Process Management System
>MLT - Mechanized Loop Test
>Predictor - A service assurance system which tests twisted pair.
>Starwriter - Order entry system for single line residence service

- Service Order Interface to the Regional SMS (Unknown)

- Local SMS development

Does not include Billing Systems impacted

Note: this is not an all inclusive list.

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LNP Systems Impacts

Ordering, Provisioning, and Service Assurance

- **Bellcore Systems:**

  CCRS: Centrex Customer Rearrangement System - Provisioning - Provides Centrex customers the ability to make their own rearrangements. (e.g., TN swaps)

  CCSN: Customer Contact Services Node - Provisioning - Provides call routing to Business Office and Repair Service for simple residence and small business customers.

  COSMOS: Computer System for Mainframe Operations - Provisioning - Primary source of telephone number (TN) assignment. Component of FACS (Facility Assignment and Control System).

  Exchange Plus: Ordering - Assist service reps in the order negotiation process by providing them, on-line, with information about exchanges, directory, etc.

  FEPS: Facility and Equipment Planning System - Provisioning - Mechanized tool in planning and implementing the way network facilities and transmission equipment should be used by provisioning.

  LIDB: Line Identification Data Base - Validation - Performs validation of calling card services for both Pacific Bell customers and some IEC customers (InterLATA).

  LFACS: Loop Facilities Analysis Control System - Provisioning - Component of FACS (Facility Assignment and Control System). Assigns and inventories local loop outside plant (cable, etc.)

  LOMOS: LAC (Loop Assignment Center) Operations Management System - Provisioning - Tracks and creates work packages of RMAs (Request for Manual Assistance) in MLACs (Mechanized Loop Assignment Center). Tracks service order activity.

  MARCH: (was Mechanized Activate/Assignment Recent Change Host) - Provisioning - System communicates with the switch; converts USOCs and FIDs to switch language. Tracks and provisions pending service orders.

  NMA-F: Network Monitoring and Analysis Facilities - Service Assurance - Monitoring, surveillance, and analysis of network transport elements.

  NSDB: Network Services Database - Provisioning - Data layer building block which provides a shared corporate database for Operations Support Systems. It provides an end-to-end view of the circuit data.

  PREMIS: Premises Information System - Provisioning - Database information retrieval system used for Service Order negotiation. Prime source of spare TNs, street address validation, status of service and available TN assignment information for residence and small businesses.

  SOAC: Service Order Analysis & Control - Provisioning - Primary controlling component of FACS. Contains the Service Order until it is complete and purged from the database.

Note: this is not an all inclusive list.

LNP Systems Impacts

Ordering, Provisioning, and Service Assurance

TIRKS: Trunks Integrated Record Keeping System - Provisioning - Manages the inventory, design, engineering and planning of the interoffice network.

WFA/C: Work Force Administration Control - Provisioning - Maintains line record data for customer services. Provides trouble ticket handling for Special Services Centers.

Pacific Bell Systems:

AMOS: Access Mechanized Order System - Provisioning - Provides work force administration for Special Service and HICAP design, testing and installation work groups.

APTOS: Automated Pricing, Terminals Options and Services - Ordering - APTOS performs many sales support functions, (e.g., pricing, configurations, circuit ID, etc.)

CESAR: Customers' Enhanced System for Access Requests - Ordering - Allows common carriers (e.g., ATT, MCI, Spring, etc.) to input their own service orders via a standard data dictionary.

CLC entry system: Competitive Local Carrier entry system, TBD.

CSFT: Customer Services Features Translator - Provisioning - Provisions features for ISDN (home and business), some features for P-Phones (electronic business sets) and SDS (small business customers).

CSTAR: Customer Service Center Smart Tools & Auto Resolver - Provisioning - Automatic resolution of System (MARCH & PBVS) generated errors.

FIRST: FACS Internal Resolution System Technology - Provisioning - Provides mechanized resolution of specific Requests for Manual Assistance (RMAs) within the FACS (Facility Assignment and Control System) system.

FWS: Frame Work Station - Provisioning - an order delivery system for provisioning of non-designed services and local loop for message and special services designed orders.

ORGIS (ISDN support): Order Repository and Generation System - Ordering - A front-end to SORD.

PBITS: Pacific Bell ISDN Test System - Provisioning & Service Assurance - Performs mechanized ISDN Testing, digital loop test, line card verification, etc.

PBVS: Pacific Bell Verification System - Provisioning - Verifies that a switch has been activated as requested in the service order.

SORD: Service Order Retrieval and Distribution - Ordering - Mechanized on-line application which accepts, edits, stores, and distributes service order for installation and/or modification of telephone and related services.

Note: this is not an all inclusive list.

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LNP Systems Impacts

Ordering, Provisioning, and Service Assurance

Pacific Bell New Systems (under development)

NAA: Number Assignment and Administration system - Ordering and Provisioning - Provides a single corporate database for use in the assignment and administration of TNs.

AP: Application Platform - Provisioning - Manages the provisioning of service requests for assembled circuits.

Other Vendor Systems:

IPMS - Integrated Process Management System - Provisioning and Service Assurance - Key functions are: order status and completion, trouble ticket status and closure, automatic billing to name a few.

LMOS: Loop Maintenance Operating System - Service Assurance and Provisioning - Trouble reporting system for customer loop. (Lucent)

MLT: Mechanized Loop Test - Provisioning and Service Assurance - Testing of copper loop facilities.

Predictor: Service Assurance - Has a circuit to every CO in the State. Test (overnight) twisted pairs to determine potential trouble.

Starwriter: Ordering - Order entry system for service reps to order residential service.

Note: this is not an all inclusive list.

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